ABSTRACT OF DISCLOSURE

A system that implements a "tangent space brush," allowing a user to paint directly onto a parameterized object, for example a three dimensional object. A tangent space brush projects coordinates from an input device to the world-space point on the surface of the 3D object. A normal is determined at that point and a brush image is projected from that point, along the normal, to the underlying surfaces. The system is implemented by providing a system that implements selecting a selected area of a displayed object, and projecting a brush directly onto a surface of the selected area.